ABSTRACT

An electrically conductive thermoplastic elastomer composite comprising an elastomer matrix and particles coated with metal as an electrically conductive filler. The electrically conductive particles are at least partly coated with a self-assembled monomolecular layer. Alternatively, the coating may comprise molecular wires that settle between the self-assembled molecules. The resistivity of the thermoplastic elastomer of the invention is low and does not substantially increase by the action of compression.